

CLAIMS

We claim:

1. A reflector lamp comprising:
a reflector body having a reflective surface, a concave shell, and a neck defining a neck cavity; and
a light source having an outer jacket which encloses a ceramic discharge vessel having an electrode seal, the electrode seal being at least partially situated within the neck cavity of the reflector body, the outer jacket having a light absorbing layer in a region of the outer jacket adjacent to the electrode seal.
2. The reflector lamp of claim 1 wherein the concave shell defines a parabolic reflecting surface.
3. The reflector lamp of claim 1 wherein the electrode seal is comprised of a frit material.
4. The reflector lamp of claim 3 wherein the frit material comprises Al_2O_3 , Dy_2O_3 , and SiO_2 .
5. The reflector lamp of claim 1 wherein the light absorbing layer lowers the temperature of the electrode seal during lamp operation by at least about 50°C.
6. The reflector lamp of claim 5 wherein the reflector lamp is a 70 watt PAR 30 reflector lamp.
7. The reflector lamp of claim 1 wherein the light absorbing layer comprises a refractory light-absorptive paint applied to the exterior surface of the outer jacket.

8. The reflector lamp of claim 1 wherein the light absorbing layer is continuous in the region of the outer jacket adjacent to the electrode seal.

9. The reflector lamp of claim 8 wherein the light absorbing layer covers the length of the electrode seal.

10. A reflector lamp comprising:

a reflector body having a reflective surface, a concave shell, and a neck defining a neck cavity;

a light source having an outer jacket enclosing a ceramic discharge vessel, the discharge vessel having a capillary and a body which encloses a discharge cavity containing a metal halide fill and a gaseous fill, the capillary extending outwardly from the body and containing an electrode assembly and an electrode seal, the electrode assembly passing through the capillary and being connectable to a power source, the electrode seal being at least partially situated within the neck cavity of the reflector, the outer jacket having a light absorbing layer in a region adjacent to the electrode seal.

11. The reflector lamp of claim 10 wherein the reflector lamp of claim 12 wherein the light absorbing light starts at a point between 0.1 mm and 2 mm below the body of the discharge vessel.

12. The reflector lamp of claim 11 wherein the outer jacket has a tubular shape and a base end, and the light absorbing layer extends circumferentially around the outer jacket and lengthwise towards the base end.

13. The reflector lamp of claim 10 wherein the discharge vessel is symmetric about an axis and has a second capillary containing a second electrode assembly and a second electrode seal, the capillaries extending outwardly from the body of the discharge vessel in opposite directions along the axis.

14. The reflector lamp of claim 10 wherein electrode seal covers about 5 mm of the electrode assembly.
15. The reflector lamp of claim 10 wherein the electrode seal is comprised of a frit material.
16. The reflector lamp of claim 10 wherein the light absorbing layer comprises a refractory light-absorptive paint applied to the exterior surface of the outer jacket.
17. The reflector lamp of claim 10 wherein the light absorbing layer is continuous in the region of the outer jacket adjacent to the electrode seal.
18. The reflector lamp of claim 17 wherein the light absorbing layer covers the length of the electrode seal.
19. The reflector lamp of claim 16 wherein the light absorbing light starts at a point between 0.1 mm and 2 mm below the body of the discharge vessel.
20. The reflector lamp of claim 19 wherein the light absorbing layer is continuous in the region of the outer jacket adjacent to the electrode seal and covers the length of the electrode seal.